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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,940	02/05/2001	Diane Troyer	xMTI-08	4485

7590 08/14/2003

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EXAMINER

DOWLING, WILLIAM C

ART UNIT PAPER NUMBER

2851

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/778,940

Applicant(s)

TROYER, DIANE

Examiner

William C. Dowling

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-12, 14-16, 66-69, 73 and 80-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 93-96 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 10-12, 14, 15, 66-69, 73, 80, 81 and 84-92 is/are rejected.
- 7) ☒ Claim(s) 3-5, 7 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claim 66 is objected to because of the following informalities: Claim 66 is incomplete. Text is missing. Please represent. Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 81 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 81 is inconsistent with Claim 80 in that claim 80 recites multiple light valves while claim 81 is limited to a single light valve.

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Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 80, 86, 3, 6, 87, 10, 11-12, 14-15, 66-69, 73, 89 91-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minich et al. (5,517,263) in view of Knize.

Minich discloses an image projection apparatus comprising red, green, and blue laser means for illuminating a writable reflective light valves and projecting a resulting image upon a surface. It is well established that red, blue, and green lights may be combined to form white and black images.

Minich does not specify the particular wavelengths of laser light.

Knize teaches the use of a red laser means which "includes" light of "about" 635nm. As noted in column 4 Lines 4-7, the red may be "around" 630nm. As best as "about" can be determined having a wavelength over "about" 635 nm and which may be "about" 647 nm is met by such a structure

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Minich et al. by the use of particular wavelength laser means as taught by Knize because such a laser is known to be preferential for image formation (See Column 3 Line 64- Column 4 Line 3).

Further, the mixture of the light can inherently be used to form colors such as black, white. It further would have been obvious to control the light valve by any of known computer signaling means such as traditional or otherwise because it is an obvious use to utilize different signal depending upon desired usage. Lacking any criticality to the operation of the invention, the use of both gas lasers and solid state lasers are deemed to be obvious choices for supplying the laser lights because both are well known to be used in projection devices. Any projector may be made to project onto any surface simply by pointing the projector in that direction. Such operation is an intended use of the claimed structure.

1. Claims 1-2, 81, 84, 86, 3, 6, 88, 10-12, 14-15, 90-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. in view of Knize.

Yamazaki et al. disclose an image projection apparatus comprising red, green, and blue laser means for illuminating a single reflective light modulator and projecting a resulting image upon a surface. See figure 9. It is well established

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that red, blue, and green lights may be combined to form white and black images.

Yamazaki et al. does not specify the particular wavelengths of laser light.

Knize teaches the use of a red laser means which "includes" light of "about" 635nm. As noted in column 4 Lines 4-7, the red may be "around" 630nm. As best as "about" can be determined having a wavelength over "about" 635 nm and which may be "about" 647 nm is met by such a structure.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Yamazaki et al. by the use of particular wavelength laser means as taught by Knize because such a laser is known to be preferential for image formation (See Column 3 Line 64- Column 4 Line 3). Further, the mixture of the light can inherently be used to form colors such as black, white, and cyan. It further would have been obvious to control the light valve by any of known computer signaling means such as traditional or otherwise because it is an obvious use to utilize different signal depending upon desired usage. Lacking any criticality to the operation of the invention, the use of both gas lasers and solid state lasers are deemed to be obvious choices for supplying the laser lights because both are well known to be used in

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projection devices. Any projector may be made to project onto any surface simply by pointing the projector in that direction.

Allowable Subject Matter

2. Claims 93-96 are allowed.

3. Claims 3-5, 7, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 7/29/2002 have been fully considered but they are not persuasive.

As to claim 2, applicant's argument that it recites "all" light at 635 nm or higher is incorrect. The language recites substantially only... about 635 nm or longer". In that Knize specifies the use of light of 630nm, this is deemed to meet the "about" limitation.

As to claim 6, it is deemed that the terms "substantially pure neutral colors.. " is deemed met because Knize teaches the use of light "about 630nm", a longer wavelength than that acknowledged by applicant.

Applicant's argument directed to claims 10-12, regarding the type of signals used is unpersuasive in that it is maintained that the use of various types of known signals would have been obvious to one skilled in the art in order to obtain desired imaging.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

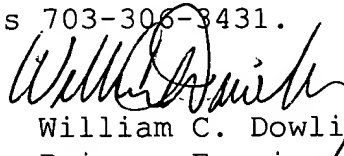
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Dowling whose telephone number is 703-308-1287. The examiner can normally be reached on Mon.-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7723 for regular communications and 703-305-7723 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.


William C. Dowling
Primary Examiner
Art Unit 2851

wcd
August 5, 2003